

H/A

Notice of Allowability

Application No.

10/748,298

Applicant(s)

HAZUCHA ET AL.

Examiner

Linh M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 12/16/2005.
2. ☒ The allowed claim(s) is/are 5-10, 12-14, 17-27, 31, 33-42, 44-46 and 48-51.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>01/04/06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

This is a reply to the Applicant's amendment submitted on 12/16/2005. According to this amendment, claims 1-4, 11, 15-16, 28-30, 32, 43 and 47 are cancelled; thus, claims 5-10, 12-14, 17-27, 31, 33-42, 44-46 and 48-51 are currently presented in the instant application.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Samuel W. Ntiros on 01/04/2006.

The Examiner's Amendment includes:

CLAIMS:

Claim 8, line 1, replace "wherein the converter further includes" with --further comprising--;

Claim 48, at the end of claim (after "value") insert --, wherein the first timing signal has a period which is a number of times longer than the clock signal--; and

Claim 50, at the end of claim, insert --.--.

Allowable Subject Matter

2. Claims 5-10, 12-14, 17-27, 31, 33-42, 44-46 and 48-51 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The closest prior art fails to disclose or fairly suggest:

- a) A circuit, in which the interim timing signal has a period which is substantially twice as long as the period of the clock signal, in combination with the remaining claimed limitations, as called for in claim 5;
- b) A signal processing method including a step of generating a timing signal from the interim timing signal, in which the interim timing signal is periodic with a period which is substantially twice as long as the period of the clock signal, in combination with the remaining claimed limitations, as called for in claim 12;
- c) A circuit, in which a timing circuit to control input of a voltage signal through a switch, and a signal processor to generate a timing signal and different portions of the timing signal independently control input of the voltage signal through the switch, in combination with the remaining claimed limitations, as called for in claim 21;
- d) A method including a step of controlling input of a voltage signal into a level converter based on a timing signal, in which different portions of the timing signal independently control switching of the voltage signal into the level converter, in combination with the remaining claimed limitations, as called for in claim 24;
- e) A circuit, in which the first timing signal has a period which is a number of times longer than the clock signal, in combination with the remaining claimed limitations, as called for in claims 31, 42, 46, 48 and 50;
- f) A circuit, in which the first logical circuit includes a data input coupled to

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receive the first timing signal and a clock input coupled to receive a signal indicative of a logical combination of the delayed clock signals, in combination with the remaining claimed limitations, as called for in claim 36;

- g) A circuit including a controller to change at least one of the first and second amounts of time in the delay lines, to adjust a position of at least one of the first and second edges of the third timing signal, in combination with the remaining claimed limitations, as called for in claim 41; and
- h) A circuit, in which the second timing signal determines which one of the delayed clock signals controls when the second circuit sets an edge transition of the third timing signal, in combination with the remaining claimed limitations, as called for in claims 45 and 49.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749. The examiner can normally be reached on Alternate Fri, Monday - Thursday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh M. Nguyen
Primary Examiner
Art Unit 2816

LMN

A handwritten signature in black ink, appearing to read 'Linh M. Nguyen', with a long horizontal flourish extending to the right.